

**PRELIMINARY RESULTS FOR
ASSIGNMENT OF TOP PRIORITY RESIDENTIAL, COMMERCIAL AND INDUSTRIAL
OPTIONS FOR ELABORATION AND ANALYSIS
WASHINGTON STATE
June 17, 2007**

Preliminary Results of Voting on Priorities – as of June 17, 2007

The tallies and comments in the table and chart below reflect the input sent in by RCI TWG members. Votes from 10 members are included here. Note that these results do not reflect “final” decisions by the TWG; we hope that they are useful in moving forward on setting priorities for detailed policy descriptions and further analysis of options.

Original Instructions for voting:

- Place an "X" in the box for the up to 10 options that you would make a priority for further analysis using your judgment on the following decision criteria:
 - GHG reduction potential (MMTCO₂e) by 2020*
 - Contribution to longer-term emission reduction goals (2035/2050)
 - Cost-effectiveness (Cost per ton GHG reduced or removed)*
 - Clean energy (or other low-GHG economy) job creation
 - Reduced expenditures on imported fuels
 - Externalities
 - Feasibility issues

** Please recall that the ratings shown in the catalogs for the first and third items (GHG reduction potential by 2020 and cost-effectiveness) above are preliminary and indicative. For priority options, further detailed analysis will be undertaken where possible, and may yield numerical results that differ from the ranges indicated.*
- Note that the following types of items are shaded (in gray) in the balloting form below:
 - **Actions for which state-wide and relatively comprehensive action (through 2020) is already underway.** For these options, existing rule making and other processes provide venues for input on design and implementation. A vote for one of these items should reflect the desire to go beyond the existing laws, rules, regulations, or incentives either in extent or timeframe (briefly describe in the comment section).
 - **Cap-and-trade and carbon tax.** These items have already been identified as priority options for further elaboration and analysis by the CAT. These items will be discussed as part of a CAT ad hoc committee that will examine regional market mechanisms broadly as part of the Western Climate Initiative. Therefore, these items do **not** need to be identified as priority items through voting, although comments are welcome.
- Provide succinct comments, if desired, to: a) explain your choices to select (or not) specific options; b) suggest consolidation of options; or c) provide other qualifiers on your selections.
- Please save your completed form **with a filename that includes your name** and email to David Von Hippel (dvonhip@igc.org) with cc to Michael Lazarus (mlaz@sei-us.org) **no later than COB (4pm) June 14, 2007.**

Residential, Commercial and Industrial TWG Balloting Form

The items in this form reflect the catalog as revised and approved by the CAT at its June 5, 2007 meeting. The catalog and catalog option descriptions are available on the RCI TWG web page, http://www.ecy.wa.gov/climatechange/cat_twg_rci.htm.

Option No.	GHG Reduction Policy Option	Vote	Comments
1.1	1.1 DSM, Energy Efficiency Programs, Funds, or Goals for Electricity	2	<i>I-937 is statewide, comprehensive (to 2020) and rule making is currently underway.</i> • http://myenergystar.com/ //
1.2	1.2 DSM, Energy Efficiency Programs, Funds, or Goals for Natural Gas, Propane, and Fuel Oil	5	<ul style="list-style-type: none"> • Add requirements for high volume transportation gas customers to install efficiency measures// • Need a measure to be at least as stringent as I-937 is with electric sector. For propane and fuel oil may need surcharge and/or incentive for 3rd party efficiency implementation.// • Important, as is encouraging fuel switching to renewable sources. // • A program such as Oregon's Business Energy Tax Credits system is a useful tool to make more efficient use of natural gas, propane, and fuel oil//
1.3	1.3 Business Energy Tax Credit	5	<ul style="list-style-type: none"> • One idea would be to focus this credit on public sector energy savings projects per Z-0057.1/03, which would modify the tax treatment of public sector ESPC projects. The net fiscal effect would be positive based on utility costs savings, albeit a tax reduction.// • Should really be renamed financial incentives and include a loan program as well. This should support performance contracting, incentives for use of recycled content in production, link to commercial 1.2 programs, // • Combine with 2.2 as a prime strategy// • Consider a program similar to Oregon's Business Energy Tax Credit (BETC) program. In a tax-intense tax such as Washington this would provide a meaningful incentive to move GHG reduction projects forward • Would be beneficial for economic development and job creation/preservation// • This really should be broader than tax credits and should include all types of incentives, including B&O tax credits for energy reductions and recycling, loan programs, or recognition programs targeting consumer choice (EnviroStar). //
1.4	1.4 Regional Market Transformation Alliance	0	

Option No.	GHG Reduction Policy Option	Vote	Comments
1.5	1.5 Private/Public Efficiency Funds	3	<ul style="list-style-type: none"> • Low or no interest energy efficiency funding pool with a large project by project cap (\$1M +) would sincerely stimulate the market.// • Financing strategies beyond what the private sector market will support today, will benefit future generations. // • Newly announced Clinton Climate Initiative program; London Energy Partnership could provide good models. MassEfficiency – building on a successful Cambridge Energy Alliance (city-model) creates a state fund providing services for Boston, other MA cities.//
1.6	1.6 Appliance/Equipment/Building/Water Performance Requirements Linked to Property Sales (and Rental)	3	<ul style="list-style-type: none"> • Difficult to enact for multi-family, could be appropriate for single family. // • If imposed on the seller, this program would be exceptionally costly. If imposed on the buyer, this program may establish a significant barrier to entry for residential markets. Price-point barriers for additional costs associated with energy efficiency packages can occur in the \$5-\$10K range// • Hook to address efficiency in existing properties: explore both Point-of-Sale and Point-of-Rental ordinance(s). Good review in CA Energy Commissions AB 549 Report: Options for Energy Efficiency in Existing Buildings. Austin, San Francisco, Berkeley.//
2.1	2.1 Advanced Building Codes for Energy Efficiency	2	<ul style="list-style-type: none"> • Energy codes should be based on unit per acre density, with low density solutions required to meet more restrictive criteria. Residential codes should also be on a per capita basis, instead of square feet, or become more restrictive as the unit or home grows in size.// • Building Codes should reflect the benefits of embodied energy in building materials and potential for carbon sequestration. Refer to Life Cycle Assessment (LCA) analysis and CORRIM work for additional information on wood, steel and cement building materials. • Would have a significant impact on GHG emissions reduction • We need to be mindful about various building practices geared towards lessening environmental impact and their effect on health issues.//

Option No.	GHG Reduction Policy Option	Vote	Comments
2.2	2.2 Promotion and Incentives for Improved Design and Construction	6	<ul style="list-style-type: none"> • Government lead by example should continue, however the private sector could use some added education and incentives to promote high performance green buildings.// • include commissioning and integrated community design elements from 2.4, include incentives for building operator certification // • Include 1.3 in this category as one of the incentive mechanisms. // • Green Building Codes should recognize the GHG-neutral embodied energy in wood and encourage the use of wood from sustainably managed forests. • All private standards for green building as well as sustainable forest management (e.g. SFI, CSA, PEFC, FSC) should be recognized in promotions and incentives. Government endorsement of any one private standard that has not been adopted through an open stakeholder process such as an ANSI process may pose legal issues for the state. • Would have a significant impact on GHG emissions reduction over the long term// • This would seem to include community design elements contemplated in section 2.4.//
2.3	2.3 Improved Design and Construction, "Government Lead-by-example"	1	<ul style="list-style-type: none"> • Investing in high performance buildings at LEED Platinum level or beyond will drive innovation and job growth in the state, while reducing long term costs.// • Governments need to recognize all standards focused on achieving green building. • Government endorsement of any one private standard that has not been adopted through a formal standard approving process like the American National Standards Institute (ANSI) process may pose legal issues for the state.//
2.4	2.4 Support for Energy Efficiency Communities Planning, "Smart Growth"	3	<ul style="list-style-type: none"> • Livable high density communities are critical to minimizing energy consumption in both buildings and transportation. // • Center for Clean Air Policy efforts in this area lay interesting groundwork; California exploring opportunities; Consensus that large portion of reductions could come from improved planning (reduced sprawl). Institute for Local Government developing "California Communities Climate Action Plan" and "California Green Community" rating tool – may not yet be released publicly.//
2.5	2.5 Establish Goals, Policies and/or Codes to Reduce Electricity Use for Heating/Drying	1	

Option No.	GHG Reduction Policy Option	Vote	Comments
2.6	2.6 Energy Efficiency Improvement in Existing Buildings, with Emphasis on Building Operations	6	<ul style="list-style-type: none"> • Promote retro-commissioning, BOC in all facilities and require Resource Conservation Managers in large portfolio organizations// • This is one of the largest missed opportunities. Buildings designed and built to operate efficiently very rarely do. More effort in this regard will yield significant efficiency reductions at relatively low costs.// • include code enforcement and retro-commissioning and building operator certification, this could include resale upgrade ideas in 1.6 and work with lenders to support energy efficiency lending// • Combine with 2.1// • Requiring every building to have an energy efficiency operator will impose significant costs on building owners. Mandating jobs is not the way to improve job creation. • It is preferable to let the free market economy function to achieve a performance standard rather than impose such specific types of costs //• Commercial benchmarking and Retro-Commissioning consistent with 2030 Challenge baseline work.// • This should include building operator certification. Programs included under this heading could include support for energy efficiency lending, and requirements for retrofitting at the time of sale. Code enforcement is a critical component.//
2.7	2.7 Reduction of Water Use	2	<ul style="list-style-type: none"> • expand to include rainwater capture and reuse in buildings. Energy and GHG benefits as well as water conservation at a time when drought and precipitation issues will be pivotal for the region.// • Combine with 2.1// • In addition to the info in the catalogue, specific efforts should include larger reclaimed water facilities and water cisterns/rain barrels (there are current legislative efforts on both these issues). Restrictions on the use of potable water for residential landscape watering could bring about major water/energy savings, as could 'water banking' in drought-prone areas. Large scale water savings will require some fundamental fixes to the Washington water code. However, there is huge potential for conservation, and huge non-GHG benefits to preserving water as sprawl, population growth and climate change put additional stresses on our water supplies.//

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2.8	2.8 Low Income Energy Programs	1	<ul style="list-style-type: none"> • Combine with 1.2// • Any program adopted by the state should be evaluated from a “means” viewpoint.// • Additional opportunity to reach rental market. Traditional disincentive for owners to invest in efficiency upgrades when tenants pay the bills. Financing options for affordable housing generally differ from those available to standard property owners.//
3.1	3.1 More Stringent Appliance/Equipment/Lighting Efficiency Standards	3	<ul style="list-style-type: none"> • Should be supported//
3.2	3.2 Ban the Sale of Incandescent Bulbs	0	<ul style="list-style-type: none"> • Needs Commerce Clause review • Hard to see jobs creation impact//
4.1	4.1 Consumer Education Programs	4	<ul style="list-style-type: none"> • Combine with 8.2 - Product Labeling// • Lots of them in all sectors// • Should be supported// • Major investment in education is a top priority. In addition to catalogue items, should include public school curricula at all levels to shape long term behavior.//
4.2	4.2 Energy Efficiency and Environmental Impacts Awareness in School Curricula	0	<ul style="list-style-type: none"> • Should be supported// • This idea should also contemplate undertaking energy efficiency audits of school buildings – usually notoriously energy inefficient – including colleges and universities • Requiring energy efficiency audits will impact GHG emissions reduction over the long term and increase jobs//
4.3	4.3 Post-secondary Specialist Education and Certification for Building Energy Efficiency Experts and Related Trades	0	<ul style="list-style-type: none"> • Should be supported as demand will exceed the supply of trained people.//
4.4	4.4 Post-secondary College and University Programs	1	<ul style="list-style-type: none"> • The “green collar” knowledge workers focused in this industry are exceedingly hard to find. We need to work to promote and fund new college and university programs, such as Lane CC in Oregon.// • Should be supported//
5.1	5.1 Green Power Purchasing for Consumers	0	

Option No.	GHG Reduction Policy Option	Vote	Comments
5.2	5.2 Net-metering for Distributed Generation and Combined Heat and Power	3	<ul style="list-style-type: none"> • A must.// • Provide incentives and eliminate barriers, especially avoided cost barriers for cogeneration • CHP plants are 1/3 more efficient, produce 50% less GHG, and save 100% of the transmission costs per MW generated. • This option also presents an important opportunity for WA to implement ways to promote and incent CHP up to 100 MW's. It is important to include generating plant sizes up to at least 100 MW's for barrier removal and incentives for up to 50% reductions in GHG per MW generated by CHP. • Significant GHG reduction benefits//
5.3	5.3 Rate Structures and Technologies to Promote Reduced GHG Emissions	5	<ul style="list-style-type: none"> • The focus of PSE's vote is on demand response strategies such as direct load control and pricing. PSE is not pursuing decoupling at this time.// • A must.// • See: National Action Plan for Energy Efficiency – key finding: Modify policies to align utility incentives with the delivery of cost-effective energy efficiency and modify ratemaking practices to promote energy efficiency investments. • See also ACEEE Report: Aligning Utility Interests with Energy Efficiency Objectives • California and Oregon success stories.//
5.4	5.4 Bulk Purchasing Programs for Energy Efficiency or Other Equipment	1	
5.5	5.5 Sales Tax Credits	0	

Option No.	GHG Reduction Policy Option	Vote	Comments
6.1	6.1 Provide Incentives to Promote and Reduction of Barriers to Implementation of Renewable Energy Systems	7	<ul style="list-style-type: none"> • This vote acknowledges overlap with the Energy Resources TWG. The ER/TWG vote will take the lead.// • Particularly small scale renewable systems. Biomass boilers, small scale wind, geo-thermal, etc. all need a boost to make cost effective.// • many components of the smart grid (6.4) and net metering (5.2) should be included in this option. // • A must. We should be the national leader in promoting these strategies as critical to our state's economy. Dramatic change needs to happen here.// • We do not support increased return on investment for utilities, which will only increase customer costs. • I-937 needs to be amended to include organic pulping byproducts as renewable fuels. • CHP plants are 1/3 more efficient, produce 50% less GHG, and save 100% of the transmission costs per MW generated. • Utilities need to establish accurate avoided costs that reflect true higher incremental costs (e.g. - new natural gas fired Combined Cycle Turbine generation). Avoided costs that are accurately filed with the utility commission can optimize existing CHP generation, and create the appropriate economic driving force needed to build new cost-effective CHP generation. Avoided costs are the most important barrier that have prevented GHG-reducing CHP development since the early 1990's in WA State. • This option also presents an important opportunity for WA to implement ways to promote and incent CHP up to 100 MWs. It is important to include generating plant sizes up to at least 100 MWs for barrier removal and incentives for up to 50% reductions in GHG per MW generated by CHP. • High interconnection cost and regulatory access barriers need also to be removed similar to OR Public Utility Commission ruling under UM 1129. • 6.1 and 6.2 should be combined for further analysis as both address barriers to more efficient energy systems. More efficient systems will increase manufacturing competitiveness and have a positive jobs impact in addition to significant GHG reduction benefits. • Highly feasible// • This should include components of the smart grid (6.4) and net metering (5.2) items. //

Option No.	GHG Reduction Policy Option	Vote	Comments
6.2	6.2 Provide Incentives and Resources to Promote and Reduction of Barrier to Implementation of Combined Heat and Power and Waste Heat Capture	5	<ul style="list-style-type: none"> • Same comment as in 6.1 with the following addition. PSE has a strong interest in CHP given its reference in I-937. Significant credit is provided for the implementation of CHP technologies.// • Yes, particularly highly efficient CHP or Biomass powered CHP in eastern Washington, or more rural areas.// • State policy should be that all new fossil fuel power plants, if any, must be CHP and located within urban environments. Ideally, this would also be true for biomass or waste gasification power plants.// • I-937 needs to be amended to include organic pulping byproducts as renewable fuels. • CHP plants are 1/3 more efficient, produce 50% less GHG, and save 100% of the transmission costs per MW generated. • This option also presents an important opportunity for WA to implement ways to promote and incent CHP up to 100 MWs. It is important to include generating plant sizes up to at least 100 MWs for barrier removal and incentives for up to 50% reductions in GHG per MW generated by CHP. • Utilities need to establish accurate avoided costs that reflect true higher incremental costs (e.g. - new natural gas fired Combined Cycle Turbine generation). Avoided costs that are accurately filed with the utility commission can optimize existing CHP generation, and create the appropriate economic driving force needed to build new cost-effective CHP generation. Avoided costs are the most important barrier that have prevented GHG-reducing CHP development since the early 1990's in WA State. • High interconnection cost and regulatory access barriers need also to be removed similar to OR Public Utility Commission ruling under UM 1129. • 6.1 and 6.2 should be combined for further analysis as both address barriers to more efficient energy systems. More efficient systems will increase manufacturing competitiveness and have a positive jobs impact in addition to significant GHG reduction benefits. • Highly feasible//
6.3	6.3 Enhance and Expand Thermal Energy Infrastructure for GHG Emissions Reduction	0	
6.4	6.4 Smart Electrical Grid	3	<ul style="list-style-type: none"> • Same comment as in 6.1// • Link to building and electrical codes. For example, electrical plug requirement for each parking space in new and remodeled construction, in anticipation of plug in hybrid and electric vehicles.// • See work initiated by GridWise Alliance//

Option No.	GHG Reduction Policy Option	Vote	Comments
7.1	7.1 GHG Cap and Trade Programs	0	<p>See instructions above.</p> <ul style="list-style-type: none"> • Need analysis on the pros & cons of the different features of a cap-and-trade system (ie: upstream v. downstream, allocation of allowances, economy wide v. sector specific, etc.) • Caution that WA state and the Western Regional Climate Action Initiative may impose restrictions that set up other states favorably (ie: the concept known as leakage) • A cap-and-trade system needs to recognize the carbon neutrality of biomass-based fuels • A cap-and-trade system must be applied economy wide and should examine the ability of certain sectors to pass costs along • Incentives are appropriate to foster investment in research and development (R&D) of energy efficiency and GHG emissions reducing technologies • Free allocation of allowances would be more equitable to manufacturing sectors//
7.2	7.2 GHG or Carbon Tax	1	<p>See instructions above.</p> <ul style="list-style-type: none"> • Taxes are regressive and will adversely impact economic development in a state that already has one of the highest tax burdens in the nation • A good example of a program to encourage renewable energy generation and energy efficiency projects at commercial sites and industrial plants is Oregon's Business Energy Tax Credit system. Developing a system that incorporated changes in the Washington's B&O tax to provide tax incentive credits similar to BETC could provide the tipping-force to more GHG reduction projects forward. • The free market economy will respond on its own to signals the government establishes in programs and policies establishing performance expectations. • Not really a positive way to encourage investment. • Will simply be a pass through for sectors other-than-utilities, and undermine economy. • Would have a negative impact on new jobs in the state and may negatively impact existing jobs.//

Option No.	GHG Reduction Policy Option	Vote	Comments
7.3	7.3 Switching to Lower GHG Fuels	1	<ul style="list-style-type: none"> • Should be supported// • Encourage incentives for investment in research & development for biomass based fuels from cellulosic materials to help breakthrough the current technology barriers to this option • Additional natural gas supplies are needed in Washington and Oregon to economically displace the use of coal and fuel oil for net reductions in GHG. Increasing LNG supply will also help mitigate high natural gas prices and volatility in the market. • Programs should encourage the construction of additional LNG terminals. • A good example of a program approach to encourage switching to lower GHG fuels at commercial sites and industrial plants is Oregon's Business Energy Tax Credit system. Developing a system that incorporated changes in the Washington's B&O tax to provide tax incentive credits similar to BETC could provide the tipping-force to move GHG reduction projects forward. • This would have a significant impact on reducing GHG emissions, particularly if "fuels" is defined broadly including transportation • Biofuels and biorefineries as new industries would provide a positive impact on jobs//
7.4	7.4 Policies and/or Programs Specifically Targeting Non-energy GHG Emissions	3	<ul style="list-style-type: none"> • These emissions are non-trivial and must be addressed.// • Should be supported//
7.5	7.5 Negotiated/Voluntary Emissions or Energy Savings Agreements	1	
7.6	7.6 Research and Development - Carbon Sequestration and Removal for RCI Energy End-users	0	
7.7	7.7 Identify GHG Emissions Impacts and Measures to Avoid, Minimize, or Mitigate them for Projects Requiring Government Review	4	<ul style="list-style-type: none"> • All new projects must reduce GHG emissions, this is about changing the way we think about all investments. Massachusetts model.// • This is a critical component of changing our "business as usual" mentality and institutionalizing an ethic to reduce GHG emissions. True mitigation should be emphasized over off-site mitigation or offsets. //

Option No.	GHG Reduction Policy Option	Vote	Comments
7.8	7.8 Identify GHG Emissions Impacts and Measures to Avoid, Minimize, or Mitigate them in Designing Rules and Regulations	1	<ul style="list-style-type: none"> • Government regulations and programs may have the unintended consequence of increasing GHG emissions. All Government action should be reviewed for potential GHG impacts so that rulemakers and law makers understand the choices they are making. • Implementation of such a program should be designed so that it is an efficient review, yet not too costly • Feasible • Would add consultant & government jobs to implement//
8.1	8.1 Appliance and Lighting Product Recycling and Design	2	<ul style="list-style-type: none"> • This broader than just appliances and lighting. Encourage recycling and reuse in all products manufactured in WA.// • Combine into RCI-3// • This is broader than just appliances and lighting. Reduce energy consumption related to product manufacturing, consumption and disposal through improved design, takeback programs, recycling, and reuse of products in Washington.//
8.2	8.2 Labeling of Embodied Life-cycle Energy and Carbon Content of Products and Buildings	1	<ul style="list-style-type: none"> • Combine with 4.1 – Consumer Education// • Should be supported// • This is a good way to allow the free market economy to function on an informed basis for relatively low costs. Let the consumer who wants to make an informed choice have the information to be able to do so. • Should include building materials used in buildings. Refer to the CORRIM study and LCA work • Highly feasible • Would produce long term GHG reduction savings • Low impact on jobs creation//

